REMARKS

Applicants respectfully request entry of the Amendment and reconsideration of the rejections of the claims.

Applicants have amended the specification at paragraph 245 to update the language concerning the deposit in accord with 37 CFR 1.801-1.809. Applicants submit these amendments do not raise any issues of new matter.

Claims 31-41, and 49-54 have been cancelled without prejudice or disclaimer. These claims were subject to a restriction requirement. Claim 10 is also cancelled. Applicants reserve the right to pursue the subject matter of these claims in one or more continuation applications.

Applicants have not cancelled claims 2, 4, 27, and 30. Applicants request that once a generic claim is found allowable, the Examiner search claims 2, 4, 27, and 30. Applicants note that these claims represent species of the generic claim.

Applicants have amended claims 11-12, 20-24 and 42. Applicants submit that the amendments are supported throughout the specification, including at paragraphs 0016, 0048, and 0244-0245. Applicants submit these amendments do not raise any issues of new matter

Rejection under 35 U.S.C. §112, second paragraph

The Examiner rejects claims 10-12 under 35 U.S.C. §112, second paragraph for alleged indefiniteness due to the recitation of 9F3. Claim 10 has been cancelled rendering the rejection of this claim moot. Applicants do not acquiesce to the rejection, but in order to expedite prosecution, claims 11-12 have been amended. Claim 11 has been amended to recite "comprising an amino acid sequence of the antibody produced by a hybridoma having ATCC Accession No. PTA-2917, or progeny thereof". Support for this amendment can be found throughout the specification, including at paragraph [0244] on page 87 of the specification. Claim 12 has been amended to recite an antibody "comprising a light chain variable domain of SEQ ID NO:3 and a heavy chain variable domain of SEQ ID NO:5". Thus, Applicants respectfully request that the Examiner remove this rejection.

The Examiner also rejects claim 42 under 35 U.S.C. §112, second paragraph for alleged indefiniteness due to dependence upon a non-elected claim. Claim 42 has been amended to

Application No. 10/044,896 Amendment dated April 1, 2005 Reply to Office Action of January 28, 2005

independent form as suggested by the Examiner. As such, Applicants respectfully request that the Examiner withdraw this rejection.

In view of the foregoing, Applicants request reconsideration and withdrawal of the rejections of claims 10-12 and 42 under 35 U.S.C. §112, second paragraph.

Rejection under 35 U.S.C. §112, first paragraph

The Examiner rejects claims 20-26 and 28-29 under 35 U.S.C. §112, first paragraph, for allegedly not enabling an anti-IFN- α antibody light chain, an anti-IFN- α antibody heavy chain and a fragment thereof. Additionally, the Examiner asserts that a complete heavy and light chain variable region, each including 3 CDRs, are required for binding an antigen. Applicants respectfully traverse.

While not acquiescing to the rejection and in order to expedite prosecution, Applicants have amended claims 20-24. Applicants have amended the claims to recite "an antigen binding fragment". Support can be found throughout the specification, including at paragraphs 0043-0051.

The Examiner contends that all six CDRs are required for antigen binding. Applicants respectfully disagree. In the first instance, the Rudikoff et al. reference cited by the examiner was published in 1982. Applicants submit that the understanding of antibody structure and function had advanced significantly since the publication of that article. Secondly, Applicants provide three representative articles which show that variable domain containing molecules that have a single variable domain can bind to antigen. In the Cai et al. reference, the authors show that a variable heavy chain domain can bind with high affinity to a melanoma antigen. The Desmyter et al. reference describes naturally occurring antibodies that only have a heavy chain variable domain. The Vaughan et al reference indicates that in some cases antibodies with different antigen specificities have the same light chain. Thus, Applicants submit that one of skill in the art would understand that not all six CDRs are required for antigen binding.

Applicants submit that they have described the structure and function of embodiments of the anti-interferon alpha antibodies or antigen binding fragments thereof. See the specification at paragraphs 0016-0021 and the Examples. Applicants have described how to characterize the binding of the antibody or antigen binding fragments and provided a working example. See the

Application No. 10/044,896 Amendment dated April 1, 2005 Reply to Office Action of January 28, 2005

specification at paragraphs 0235, 0236, and 0243. Applicants submit that it would be routine for one of skill in the art to determine if a heavy or light chain variable domain as described in the application could bind to the antigen.

Applicants submit that the specification as filed enables claims 20-26 and 28-29. Applicants respectfully request withdrawal of the rejection on this basis.

The Examiner rejects claims 13, 43, and 44 under 35 U.S.C. §112, first paragraph for allegedly not enabling the use of the hybridoma having ATCC accession number PTA-2917. While not acquiescing in the rejection and in order to expedite prosecution, Applicants hereby submit a Declaration that the deposited material has been deposited under the Budapest Treaty. Applicants have also amended the specification to update the statement regarding the deposits.

In view of the foregoing, Applicants request reconsideration and withdrawal of the rejections of claims 13, 20-26, 28-29, and 43-44 under 35 U.S.C. §112, first paragraph.

Objection to Claims 45-48

The Examiner objects to claims 45-48 for "being depended upon rejected claims." Applicants respectfully traverse.

First, claim 45 depends upon claim 1, which the Examiner has allowed. Second, claims 46-48 depend upon claims 11, 12, and 24, respectively. Claims 11 and 12 are rejected under 35 U.S.C. §112, second paragraph for allegedly being indefinite. Applicants submit that they have addressed the rejection of claims 11 and 12. Claim 24 is rejected under 35 U.S.C. §112, second paragraph for allegedly lacking enablement. Applicants have traversed the rejection by providing evidence that not all six CDRs are essential for antigen binding. In view of the foregoing, Applicants request reconsideration and withdrawal of the objection to claims 45-48.

Application No. 10/044,896 Amendment dated April 1, 2005 Reply to Office Action of January 28, 2005

SUMMARY

In view of the foregoing, the Applicants believe that the claims are in condition for allowance and such action is respectfully requested. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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Date: <u>april 1 7005</u>

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